

Appl. No. 10/698,537
Amdt. Dated March 17, 2005
Reply to Office Action of November 17, 2004

REMARKS

Claim Rejections – 35 USC § 103

The Office has quoted the statute from 35 USC 103(a), which is referenced herein. The Office has rejected claim 1-10, 12, and 13 as being unpatentable over US Pat. No. Tamada. The Office Also rejected claims 11 and 14 as unpatentable over Tamada in light of Suzuki et al. Applicant has carefully considered the Office rejections and respectfully submits that the amended claims, as supported by the arguments herein, are distinguishable from the cited reference.

According to the MPEP §2143.01, "[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art."

A useful presentation for the proper standard for determining obviousness under 35 USC §103(a) can be illustrated as follows:

1. Determining the scope and contents of the prior art;
2. Ascertaining the differences between the prior art and the claims at issue;
3. Resolving the level of ordinary skill in the pertinent art; and
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

The applicant respectfully disagrees with the Office's characterization of what would be within the knowledge of one skilled in the art. The applicant notes, and the Office concedes, that the Tamada reference does not disclose the proportions of resins of the claimed invention. The Tamada reference's mention of such combination was in passing and did not disclose the "excellent mixing" of the claimed invention. To achieve the properties of the composition recited in the claims, the applicant submits that the resin and other materials must be excellently mixed.

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Indeed, the applicant respectfully submits that such an excellent mixing amounts to the creation of a thermoplastic alloy or substantially homogenous blend, wherein the components are blended thoroughly or one resin is dissolved into the matrix of a second resin. Examples of excellent mixing include mixtures affected by techniques such as micro-dispersion and acid grafting, this latter being the modification applied to the modified PPE of Examples 1-3. The applicant notes that in the absence of such an excellent mixing, the resins listed in the Tamada reference as potentially mixed, rather than excellently mixed, would separate and not provided the desired properties. The resulting composition is highly resistant to variations in strength and flexibility resulting from ambient temperature fluctuations, which, as noted by the Office, are expected when working with thermoplastics. The applicant further notes that Tamada does not disclose the use of polystyrene. The applicant respectfully notes that if this composition were obvious, then it should be easy to find a reference that suggests modifying the cited references to the substantially homogenous blend of the claims. Office is kindly reminded that "assertions of technical fact in areas of esoteric technology must always be supported by citation of some reference work" and "allegations concerning specific knowledge of the prior art, which might be peculiar to a particular art should also be supported." MPEP § 2144.03. The Applicant notes that a reference that merely discloses or suggests the general concept of blended thermoplastic alloys.

In regard to claims 11 and 14, rejected by the Office in light of the Suzuki reference, the office has provided no reference that supports a determination that the specific ratios of components of the claimed invention are obvious. The improvements evidenced in the data provided in the application, as acknowledged by the Office in section 6 of its office action response, are not well known in the art, or expected, as the "resins" and mixtures thereof offer decreased impact absorbing ability as the temperature drops (they become stiffer/harder) and offer increased absorbing ability as the temperature rises (they become more compliant/softer). The applicant notes that this is the specific behavior the invention is designed to mitigate or eliminate.

The applicant respectfully submits that at least for these reasons, the claims as amended are patentable over the Tamada and Suzuki references.

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Applicant believes the above amendments and remarks to be fully responsive to the Office Action, thereby placing this application in condition for allowance. No new matter is added. Applicant requests speedy reconsideration, and further requests that Examiner contact its attorney by telephone, facsimile, or email for quickest resolution, if there are any remaining issues.

Respectfully submitted,



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